

Notice of Allowability

Application No.

10/088,811

Examiner

Alain L. Bashore

Applicant(s)

WALTHAM ET AL.

Art Unit

1792

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 12-13-07.
2. ☒ The allowed claim(s) is/are 1-7,10 and 13.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

ALAIN L. BASHORE
PRIMARY EXAMINER

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see pages 10-17, filed 12-13-07, with respect to the art rejection of record have been fully considered and are persuasive along with the examiner's amendment below. The rejections of the previous office action have been withdrawn.

EXAMINER'S AMENDMENT

2. The application has been amended as follows:

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Bianco on 2-4-08.

The application is amended as follows:

Cancel claim 14.

Allowable Subject Matter

3. Claims 1-7, 10, 13 are allowed.

Reasons for allowance

4. The following is an examiner's statement of reasons for allowance:

The present invention includes independent claims 1 and 6. Claims 1 and 6 both recite a method of manufacturing flexible magnetic tape having permanently structured magnetic characteristic which varies from place to place in two different directions in a plane of the tape.

Lee ('204) is considered the closest prior art. Lee ('204) discloses A method of manufacturing flexible magnetic tape having a permanently structured magnetic characteristic which varies from place to place in two different directions in the plane of the tape.

Lee ('204) does not disclose the claimed combination including:

In Claim 1:

providing a flexible elongated substrate with a layer of material having a permanently structured magnetic characteristic which varies in a first direction making an oblique angle relative to the a longest dimension of the substrate;

Art Unit: 1792

coating the substrate with a slurry comprising anisotropic magnetic particles;

moving the substrate and slurry coating relative to a magnetic field having a field strength which varies with time in a second direction making an oblique angle with the first direction;

orienting, in response to moving the substrate, the said magnetic particles on selected spaced areas of the substrate in a second direction making an oblique angle with the first direction, whereby the magnetic particles oriented in the second direction are overlaid on top of the permanently structured magnetic characteristic which varies in the first direction; and

solidifying the slurry to fix the said magnetic particles in place;

wherein points on the tape are uniquely identifiable by a single linear movement of a read head.

In claim 6:

coating a flexible substrate with a slurry comprising anisotropic magnetic particles;

moving the substrate and slurry coating relative to a first magnetic field having a field strength which varies with time in a first direction:

orienting, in response to the moving, the said magnetic particles in a first direction;

whereby the particles oriented in the first direction produce a detectable pattern oriented in the first direction;

subsequently moving the substrate and slurry coating relative to a second magnetic field having a field strength which varies with time in a second direction making an oblique angle with the first direction;

orienting in response to the subsequently moving, a subset of the said magnetic particles on selected spaced areas of the substrate in a second direction making an oblique angle with the first direction, whereby the subset of the particles oriented in the second direction produce a detectable pattern in the second direction which is superimposed over the detectable pattern oriented in the first direction;

solidifying the slurry to fix the said particles in place;
characterized in that the first magnetic field has a magnetic field strength which varies with time in said first direction, such that following step e) the said magnetic particles are selectively oriented in spaced areas in both said first and said further directions; and

wherein the first detectable pattern and the second detectable pattern are uniquely identifiable by a single linear movement of a read head.

For these reasons claims 1 and 6 are deemed to be allowable over the prior art of record, and claims 2-5, 7, 10, 13 are allowable by dependency.

Art Unit: 1792

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alain L. Bashore whose telephone number is 571-272-6739. The examiner can normally be reached on about 7:30 am to 5:00 pm (Mon. thru Thurs.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1792

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Alain L. Bashore/
Primary Examiner, Art Unit 1792